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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,511

05/08/2006

Masaru Nakakita

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STEPTOE & JOHNSON LLP
1330 CONNECTICUT AVE., NW
WASHINGTON, DC 20036

EXAMINER

FAYYAZ, NASHMIYA SAQIB

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

02/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,511	Applicant(s) NAKAKITA, MASARU	
	Examiner Nashmiya S. Fayyaz	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 11/18/08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: as in amended claim 1, "determining a first time ...from a second detection element only" and "determining whether the peak...from the second element is detected before or after the first time" and as in amended claim 9, "a measurement device determining whether a maximum value...is detected before or after a maximum value of an output from the second detection element, thereby determining a vibration type". There is no support for determining whether a peak is before or after, but rather page 22, lines 20 et seq refer to determination of a time difference which is not the same thing. Further, it is indicated that the contact type is determined, not the vibration type.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, on line 17, it is unclear what is meant by "from the second detection element only". What does the "only" mean? On lines 19-20, "the detection output" lacks clear antecedent basis. Further, lines 24 and 25 are not at all clear since the peak from the "first time" is from the "second detection element" and lines 24-25 also refers to the peak of the "second detection element". How can the same peak be compared to itself and what does "before or after the first time" mean? Furthermore, it is unclear how the type of contact is determined. When is the detection output from the first detection element even used? In claim 9, in the last paragraph, it is unclear how the "vibration type" is determined. It would appear the type of contact would be determined rather than the vibration type. Also, what are the "plurality of vibration types"? Please provide support from the specification.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the

time the application was filed, had possession of the claimed invention. See paragraph 1 above.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al-US Patent # 6,105,432. As to claims 1-3, as best understood, Taniguchi et al. disclose a magnetic disk 1, slider 2 with head(not shown), suspension (arms 6), first detection element (AE sensor 101) and second detection element (AE sensor 105) where the method includes a detection output from sensor 105 (coming in to amp 20A), detection output from sensor 101 (coming in to amp 20B), determining effective values of each in 40A and 40B, and further determining the type of contact based on the outputs, see fig. 4 and col. 9, lines 5 et seq. It is noted that Taniguchi et al refer to determination of an "effective value" but lack a teaching of peak determination. However, usage of peaks of vibrations as an effective value of the vibration is old and well-known. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the peak as the effective value since the vibrations are being measured which are known to have an envelope of periodic motion and by measuring the peak, an effective value can be obtained for comparison to a different signal and its peak. As to claims 9 and 10, as best

understood, Taniguchi et al. disclose a rotating magnetic disk 1, slider 2 with head(not shown), suspension and slider holding mechanism (arms 6), first detection element (AE sensor 101) and second detection element (AE sensor 105) and measurement device (20A/B, 40A/B, 45A/B and 19) which determines an effective value from each sensor 101/105 and compares the two values to determine the type of contact-contact or no contact (loading/unloading) from the comparison, see fig. 4 and col. 9, lines 2 et seq. It is noted that Taniguchi et al refer to determination of an “effective value” but lack a teaching of peak determination. However, usage of peaks of vibrations as an effective value of the vibration is old and well-known. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the peak as the effective value since the vibrations are being measured which are known to have an envelope of periodic motion and by measuring the peak, an effective value can be obtained for comparison to a different signal and its peak.

Response to Arguments

8. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments filed 11/18/09 have been fully considered but they are not persuasive. Applicant has argued that there is support on pages 21-22. However, it appears that Applicant's amended claims do not find support in the specification since there is

no support for the items listed above in paragraph 1. Further, applicant continually refers to key elements which are not even depicted in the drawings.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Tuesdays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/N. S. F./

Examiner, Art Unit 2856

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856